## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Solus et al.

Art Unit: 1637

Serial No.: 09/891,332

Examiner: Tung, Joyce

Filed: June 27, 2001

Conf. No.: 4572

For: POLYMERASES FOR ANALYZING

OR TYPING POLYMORPHIC **NUCLEIC ACID FRAGMENTS AND**  Atty. Docket. No.: IVGN 170.1 DIV

**USES THEREOF** 

## **DECLARATION OF DEB K. CHATTERJEE UNDER 37 C.F.R. § 1.132**

**Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I, Deb K. Chatterjee, declare and state as follows:

- 1. I was employed at Life Technologies, Inc. (LTI) from 1986 to 2000.
- 2. During my employment at LTI, I headed the Enzymes and Recombinant DNA Technology Group, where I supervised the cloning, expression, purification, and characterization of wild-type and mutant DNA polymerases.
- 3. I have reviewed U.S. Patent Application No. 09/891,332, which names Joseph Solus and Shuwei Yang as inventors, and I am familiar with the technology described in that application.

- 4. I have reviewed U.S. Patent No. 5,939,301, which names John Hughes and Deb Chatterjee as inventors, and I am familiar with the technology described in that patent.
- I directed fellow LTI researchers John Hughes, Joseph Solus, and Shuwei Yang in
  efforts to produce and characterize mutant DNA polymerases and to develop assays
  using mutant DNA polymerases as described in U.S. Patent Application No.
  09/891,332 and U.S. Patent No. 5,939,301.
- 6. I conceived or invented mutant *The* DNA polymerases having reduced 3' to 5' exonuclease activity, 5' to 3' exonuclease activity and mutations in the O-helix domain, including mutant polymerases having a Tyr for Phe substitution at amino acid position 67 disclosed in U.S. Patent No. 5,939,301.
- 7. I declare that all statements made above of my own knowledge are true, that all statements made on information and belief are believed to be true, and further that willful false statements and the like are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the U.S. Cod and may jeopardize the validity of any patent issuing from U.S. Patent Application No. 09/891,332.

Sapt 24,2007 Date

Deb K. Chatterjee